

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
28 October 2004 (28.10.2004)

PCT

(10) International Publication Number
WO 2004/092740 A2

(51) International Patent Classification⁷: G01N 33/68, 33/53

(21) International Application Number:
PCT/US2004/010686

(22) International Filing Date: 7 April 2004 (07.04.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/461,016 7 April 2003 (07.04.2003) US

(71) Applicant (for all designated States except US): **RIBONOMICS INC.** [US/US]; 3908 Patriot Drive, Durham, NC 27703 (US).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **CHEATHAM, Bentley** [US/US]; 5524 Jomali Drive, Durham, NC 27705 (US). **HENDERSON, Barry** [US/US]; 504 Deerhaven Ct., Hillsborough, NC 27278 (US). **PHELPS, William, C.** [US/US]; 5805 Kiltshire Road, Durham, NC 27712 (US).

(74) Agent: **STEEL, Diana, M.**; Testa, Hurwitz & Thibault, LLP, High Street Tower, 125 High Street, Boston, MA 02110 (US).

(81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: METHODS FOR IDENTIFYING THERAPEUTIC TARGETS INVOLVED IN GLUCOSE AND LIPID METABOLISM

(57) Abstract: The identification and evaluation of mRNA and protein targets associated with RNA binding proteins or mRNP complexes is described. In particular, the invention provides methods for identifying RNA binding proteins associated with physiological pathways that participate in glucose and lipid metabolism and mRNAs that exhibit coordinated gene regulation across those pathways. Candidate targets are provided that are useful for the diagnosis or treatment of diseases related to diseases, such as disease related to aberrant glucose and lipid metabolism, such as, for example, obesity, diabetes, and hypoglycemia.

WO 2004/092740 A2